DOCUMENT RESUME

ED 229 980 EC 152 544

AUTHOR Arko, Carl; And Others
TITLE Vocational Education for the Handicapped: A Model for Appropriate Placement and Effective Teaching.
PUB DATE 8 Apr 83
NOTE 29p.; Paper presented at the Annual International Convention of The Council for Exceptional Children (61st, Detroit, MI, April 4-8, 1983).
PUB TYPE Speeches/Conference Papers (150) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Disabilities; Inservice Teacher Education; Secondary Education; *Special Education; *Student Placement; *Vocational Education

ABSTRACT

Three papers discuss issues in providing vocational education services to handicapped children. In the first, "Vocational Education Speaks to Special Education," G. Rackliffe and N. Pearson consider aspects of appropriate placement and describe a handbook produced to address vocational issues for special educators. The handbook covers such topics as vocational-technical programs, learning activities, and the Assessment of Vocational Readiness (a 16-item instrument measuring readiness to profit from vocational training). The next two papers, "Teaching the Emotionally Impaired Student" by G. Schirmer and "Teaching the Learning Disabled Student" by R. Riegel, are part of an inservice training program in which special education staff share information with vocational education staff. Among appendixes is a sample unit on electricity. (CL)

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VOCATIONAL EDUCATION FOR THE HANDICAPPED

A MODEL FOR APPROPRIATE PLACEMENT AND EFFECTIVE TEACHING

Prepared for The National Council for Exceptional Children Conference
Detroit, Michigan - April 8, 1983

Presenters

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Prepared for The National Council for Exceptional Children Conference
Detroit, Michigan - 1983

VOCATIONAL EDUCATION FOR THE HANDICAPPED: A MODEL FOR APPROPRIATE PLACEMENT & EFFECTIVE TEACHING

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INTRODUCTION

Nancy Pearson
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This is a presentation of materials developed under an ESEA Title IV-C project to improve the placement and teaching of handicapped students in vocational classrooms. In Michigan, vocational education begins at the secondary level with two to three-hour classes designed to give juniors and seniors the job skills needed for entry level employment. Special education students are often mainstreamed into these classes with over 90% of the mainstreamed students being learning disabled, emotionally impaired, or educable mentally impaired.

In discussions between vocational teachers and their special education counterparts variations of the same two concerns were repeatedly expressed. The special educators wanted to know more details about vocational course offerings and how to predict potential student success: appropriate placement. The vocational educators expressed a need for specialized techniques to more effectively deal with students who have learning or behavior problems: effective teaching techniques.

In response to these needs the project staff developed a handbook which is a detailed description of the programs and services offered locally by vocational education and a 16-item evaluation instrument to help predict the student's potential for success in a particular vocational class: vocational education talks to special education. They also developed a teacher training program to provide vocational teachers with some of the techniques that special education has found effective. This program addresses behavior problems and learning problems and uses two movies to demonstrate the techniques in use in vocational classes: special education talks to vocational education.

We will begin by addressing the problems of appropriate placement. Following this, the teacher-training program will be discussed and segments of the demonstration films will be shown.

VOCATIONAL EDUCATION SPEAKS TO SPECIAL EDUCATION

Gary Rackliffe
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The problem of appropriate placement involves two factors: making information about vocational education available to special education personnel and providing some measurement tool to evaluate the student's readiness to benefit from placement in a particular vocational class.

Our talks with special educators showed us they felt that vocational education was an important part of their students' preparation for life, but that placement in a class was often done on a hit-or-miss basis with little information about the class. Often they did not appreciate the specialized nature of vocational classes and how they differ from prevocational or industrial arts classes, and would enroll students in classes for which they had no background or apptitude with the natural result being low student success.

The people who work with special education students who are being considered for mainstreaming into vocational education classes need to know the following things about vocational classes (not necessarily in a priority sequence):

- .The type of jobs for which the class prepares students.
- .The types of learning activities the course includes.
- .The background and expectations of the instructor.
- .The grading policy.
- .Personal traits and background experiences of students who have been successful in this class and in beginning a career.
- .The math and reading requirements of the class.
- .The classes that would help students explore this career area or prepare them for this vocational class.
- .The enrollment procedures and administrative policies of the vocational educational agency.
- .The services offered in addition to or in support of the vocational classes.

In a fully staffed, comprehensive high school with an active communications network, this information would be readily available from the vocational counselor, the special needs director and staff, or through some other office. In many districts, this type of administrative and geographic unity and communications network does not exist, and some other mechanism must be found to provide the information needed to insure appropriate placement.

Ours is an intermediate school district which provides vocational education services for the local school districts of two Upper Peninsula counties. The district includes 8 local schools with a total of 3300 secondary students, 640 of whom are in vocational education; and covers 2400 square miles. Because we have no area center building for vocational classes, our 15 courses are offered in 8 different locations. All of this makes it very difficult for the special education personnel to become familiar with the vocational education offerings and staff. It also makes it impractical for vocational teachers to attend IEPC meetings.

THE I.S.D. VOC. ED. BOOK

Our solution was to prepare a book: Everything You Ever Wanted To Know About Secondary-Level Vocational Education In Delta & Schoolcraft Counties But Didn't Know Who To Ask, or, more simply, The I.S.D. Voc. Ed. Book. The book is in a loose-leaf notebook allowing easy updating which is important in our ever-changing system.

The information is presented in an "annotated outline" format; major heading with subheading and brief descriptions to give enough detail for the users to determine if service is something they need. When more information is required, each section contains the photograph, name, address, and telephone number of the person who is responsible. This format was chosen in response to our advisory committee's request for enough information to make preliminary decisions, but insufficient time to read volumes of detail. An example of this is Appendix A, a sheet from the Post-Graduate Services section.

The book is divided into sections which address the major concerns of the special education people in our area.

I. PRE-VOCATIONAL PREPARATION

The vocational classes were grouped into five clusters. Within each cluster we listed the classes offered by each local district that would help prepare student for vocational training within that cluster.

II. ADMINISTRATION & ENROLLMENT POLICIES

This section contains a brief summary of the state guidelines for vocational education, a description of the administrative structure including the name, address, phone number, picture, and responsibility areas of both of our administrators.

III. WORK PROGRAMS

Because work experience is one of the most important factors in students' vocational class and job success, this section lists work programs sponsored by local agencies and school district programs such as co-op and the Basic Work Permit.

IV. VOCATIONAL-TECHNICAL PROGRAMS

This is a detailed description of each of the vocational classes offered by the district. The information for one of these classes will be reviewed in detail in the next portion of our presentation.

V. POST GRADUATE SERVICES

This is a complete listing of the services provided by our job placement office. It includes photographs of the staff and their names, address, and telephone number (Appendix A) as well as samples of the forms used in preparing the Personal Data Packet used by our graduates. Other agencies; for example, Bureau of Rehabilitation, are listed with the name, address, and telephone number of the local contact person.

VI. YOUTH ORGANIZATIONS

Vocational youth organizations play an important part in many of our programs and this section describes the activities offered and the people to contact for more information.

VII. SPECIAL PROJECTS AND SERVICES

The I.S.D. is often called upon to provide special services to groups of students or to the entire student body. This section describes the services currently being offered, the eligibility requirements and the people to contact for more information.

VIII. THE ASSESSMENT OF VOCATIONAL READINESS

This is a measurement tool which will be described in detail following the next section of this presentation.

VOCATIONAL-TECHNICAL PROGRAMS

The most important section of this book is the one which details the vocational-technical programs offered by our district. There is a description of each of the 15 careers for which we offer training. The section on Electricity is typical and will be used as an example. (A copy of the Electricity section is included as Appendix B.)

TYPICAL JOB TITLES & EMPLOYERS

Rather than include a career ladder, which is often just a hypothetical plan obtainable only by an exceptional individual, we listed actual jobs that graduates of our programs have gotten. This information came from placement records and state follow-up studies going back as far as 1972. This list is by no means complete, but it is a sample of graduates working in jobs related to their vocational class which shows the proportion of local versus regional or out of the region locations; the proportion of military enlistments; typical job titles; and the proportion of students who continued their education at the post secondary level. The picture at the bottom of the page is of a graduate on the job.

COURSE DESCRIPTION

The course description tells the types of jobs for which students are prepared, the things they will learn, and the types of activities used in the class. The picture on this page shows the shop, classroom, or equipment related to the class.

LEARNING ACTIVITIES

This part of the description of the course has an outline of the course content on the left side of the page and a brief statement of what the unit involves or why it is important for preparation in this career area. One of the considerations here is to help special educators and their students become familiar with the entire scope of the class. Special education teachers have told us that this information would be useful in counseling students and their parents who do not realize all of what is involved in learning a marketable skill.

This section is three to five pages long depending on the complexity of the program. The information was gathered from interviews with our teachers and reflects how the courses are operated in our district.

The local nature of the book and its contents are of major importance. All of what is included comes from local educators who are dealing with local students in local facilities. As useful as state guidelines and university-generated instructional plans may be; the special educator needs to counsel students and their parents on the basis of what it is really like here; not what it can or should be. This is not to say that we are not in compliance with all guidelines, or that we do not make use of the latest teaching innovations; rather it is is meant to emphasize the importance of the local nature of this book.

TEACHER PROFILE

Because of the nature of our district it is not possible for vocational teachers to attend IEPC meetings as often as would be ideal. The next two pages of the book are an attempt to bring something of the teacher's personality, background, thoughts and expectations into the IEPC process. What was included, how it was said, and what was not included was the decision of the individual teacher. We suggested the types of things to include, but the final decision was made by the teacher involved. None of this material was reviewed by our administration before publication.

Most teachers used an outline format to show their work experience and educational background on the first page. Also included was a photograph, address, and telephone number. Hopefully this will encourage people with a question about the class to call the teacher, the person who has the answers and is most familiar with every detail.

The back side of this page contains the teacher's comments about their classes and the grading policy. These comments are the results of tape recorded interviews between the teachers and the project staff. The transcripts of the interviews were edited for length and then reviewed by the teachers before publication. Any changes the teachers wanted were made and the material was reviewed again. Nothing was published without the approval of the teachers; but, as mentioned before, none of this was seen by the administration before printing. We felt it was important to give the teachers' honest views of their classes without any outside influence.

Careful reading of these pages and the one that follows may reveal inconsistencies, or may lead the reader to think there are some important things being left unsaid. The user is encouraged to call the teacher involved and discuss any questions that arise.

THINGS TO CONSIDER BEFORE ENROLLMENT

SUCCESS INDICATORS

This is a listing of abilities, traits, or experiences that students who have been successful in this class and career area have had. The most important factor is a demonstrated interest in the career area. Interest could be demonstrated by successful completion of suggested prevocational classes, hobbies, job experience related to the field, or other activities. The items on this list should not be taken as prerequisites, but the placement of a student who has none of the traits or experiences into this class should be carefully considered.

TYPICAL MATH PROBLEMS

Rather than indicate a grade level for math performance, we gave a few math problems which are typical of the math abilities the student will need.

TEXTBOOKS

This is the title and readability level of the textbooks used in the class. The emphasis on math or reading varies from class to class and even between instructors in the same class. Again, the person using the book is encouraged to call the teacher for details on the amount of math or reading, their importance in the development of job-entry level skills, and possible accommodations for the special education student.

SUGGESTED PREVOCATIONAL CLASSES

These classes can provide valuable career exploration experiences and skill development. When possible, this should begin in junior high to give the student as many exploration opportunities as possible before the vocational decision is made.

GENERAL INFORMATION

This is information on class size, location, times, and transportation.

With the information in the book and the contact people who are identified, the special educator should be able to get the right kid into the right class for the right reasons.

ASSESSMENT OF VOCATIONAL READINESS (AVR)

The Assessment of Vocational Readiness (AVR) (Appendix C) includes sixteen questions to be answered before the IEPC meeting and space to describe the support services that special education plans to provide to compensate for weaknesses the student may have.

The questions represent measures of student readiness to profit from vocational training. They not only reflect considerable research; but, more importantly, they were drawn from the practical experience of vocational educators. The questions have been weighted to show relative importance. The number of points assigned to the question is entered in either the "Yes" or "No" column; the

columns are totaled and the "No" points are subtacted from the "Yes" points. A positive final score indicates potential for success while a negative score brings the placement into question. The larger the positive or negative number, the stronger the indication. We have not set any absolute cut-off values at which students would be refused enrollment in a class, nor do we quarantee success for high scoring students. The items cover a number of areas.

CAREER EXPLORATION

These items relate to the student's experience with the particular class under consideration. Students do better in vocational classes that they have chosen, for whatever reason; and if they have a relative working in that career area, the success rate is increased.

WORK EXPERIENCE

Because of the job orientation of vocational classes, students who have had any opportunity to develop job disciplines such as punctuality, staying on task, and following instructions have a better chance of success. There is no reference here to the quality of the work experience (lawn mowing versus fulltime summer job in the chosen career) for the sake of simplicity.

I.S.D. VOC ED BOOK

We feel that if the student and parents review the section of the book that describes the class, it will help insure that the choice is made on the basis of realistic information and that everyone will have a better idea of what to expect during the course.

PREREQUISITE COURSES

We offer two vocational courses which require courses before entry: Steno-Clerical requires Typing and Accounting requires Bookkeeping. These requirements are set at the state level.

COMMUNICATION, COMPUTATION, AND PERSONAL-SOCIAL SKILLS

Based on the information on the "Things To Consider Before Enrollment," will the student be able to deal effectively with the course material?

EMPLOYMENT FEASIBILITY

One of the things we want to avoid is setting up unrealistic expectations for students or their parents. Our classes are designed to prepare our graduates for jobs; but, expecially in our two counties, there is high unemployment in many of our career areas. We want students or their parents to call our job placement director and have some idea of the employment picture before starting the training.

The second portion of the AVR (Part B) allows special education personnel to indicate what they will be able to do in support of the proposed placement.

The AVR is designed to be flexible. If students score low, they can gain points by particpating in a number of activities that have been shown to improve the chances for success in class and beginning a career. Under no circumstances

should this be used to bar a student from enrolling in a class. Negative scores on the AVR should act as a warning that this placement will need support and may not be successful; but when students have had the benefit of carefully planned and sustained support services, they have been successful in school and on the job.

We hope that The I.S.D. Voc. Ed. Book will give special educators the information they need to help their students make an informed choice about their vocational training, and that the AVR will prove to be a useful tool in the process of counseling students and their parents.

SPECIAL EDUCATION SPEAKS TO VOCATIONAL EDUCATION

In the next two sections of this presentation we will describe an inservice training program for vocational and general education teachers in which special education people share some of the techniques they have found effective for helping students with learning or behavior problems.

TEACHING THE EMOTIONALLY IMPAIRED STUDENT

Gene J. Schirmer, Ph.D.
Delta-Schoolcraft I.S.D.
810 N. Lincoln Rd.
Escanaba, MI 49829

As indicated, vocational education teachers asked for specific help in dealing with various types of handicapped students. One of the categories that concerned vocational education teachers was that of the emotionally impaired student. This is probably because the label itself is quite threatening for most general education and vocational education teachers. They envision students who are disturbed, possibly very aggressive. They may occasionally confuse emotional impairment with mental retardation as well. In response to their concerns, however, it was felt that a training program for vocational education or general education teachers was necessary to familiarize them with the nature of the emotionally impaired student and strategies for dealing with that student. It should be pointed out that, in Michigan, students in vocational education classes in public schools are mildly handicapped students. For the most part, their behaviors are not dangerous and they would have the prerequisite academic skills to succeed in the vocational or general education class.

The film of which you are about to see a brief segment was developed as a lead-in to these training activities. In addition, the film can be used as a training device as well. The film and the training session both assume that the vocational education and general education teachers, who are viewing and/or participating, have little or no background in behavior modification strategies. It also assumes that there is a special education support system to assist the vocational education or general education teacher in developing and implementing strategies. As indicated, the film is an awareness film to prepare these teachers for a workshop, not to teach them these concepts. The film, Teaching the Emotionally Impaired Student, is a 20 minute, 16mm color sound film portraying four common types of emotionally impaired or emotionally disturbed students. These types are: passive/withdrawn, disruptive/non-aggressive, disruptive/aggressive, and the social isolate. These students are shown in vocational education classroom settings interacting with vocational education teachers and their peers. The film demonstrates the use of various behavior modification strategies by the teacher in dealing with these students behaviors. Some of the strategies demonstrated in the

others relate more to consequences (e.g., concepts of positive reinforcement, negative reinforcement, punishment, extinction, and over-correction). In terms of student response capability, we also demonstrate behavioral rehearsal in the film.

As suggested, a workshop for vocational education and general education teachers is also planned as a result of this project. It is anticipated that the workshop will be approximately 4 hours in length. The film, Teaching The Emotionally Impaired Student, will be used in two ways: for awareness, and then for detailed analysis of each segment by workshop participants. Other materials to be used in the workshop would include materials for background reading such as The Managing Behavior Series by R. Vance Hall. We will also provide sample psychological reports for participants to review and develop strategies in simulation staffings. Discussion and some lecture will also be used to teach the basic learning principles.

The primary goal of the film and workshop is to make vocational education teachers aware that behavior modification strategies provide specific, effective techniques for dealing with various problem behaviors of the emotionally impaired student.

A secondary goal of the training session is to make vocational education teachers aware that there is or should be a special education support system available to them and suggest how it should be used. Special education staff should be available to assist in developing and implementing strategies as well as to provide the vocational education teacher with the necessary background information on the student. The simulation activities of the staffings will include practice for the vocational education teacher in obtaining information and practical assistance from the special education staff member. This simulation should delineate mutual responsibilities as well, suggesting an ongoing interaction between special education and general education staff.

In summary, with the film, other materials, and the workshop experience we have planned, we hope that participating vocational and general education teachers will gain not only skills but increased awareness of their resources and capabilities for working with the mildly emotionally disturbed student. We also hope to convey the idea that the strategies being presented are appropriate for many students who are not labeled emotionally disturbed, but who present similar behavior problems.

TEACHING THE LEARNING DISABLED STUDENT

R. Hunt Riegel, Ph.D., Director
Model Resource Room Project
Plymouth-Canton Community Schools
454 Harvey
Plymouth, MI 48170

Students who are learning disabled often are placed in general education and vocational education classes. The likelihood of success in these placements is greatly influenced by the ability of the general education teacher to modify his or her methods of presentation, materials, and evaluation procedures.

Regular education teachers are likely to make adjustments in the program if they are aware of possible modifications, are taught how to make these modifications, and receive support from special education staff in making these modifications.

The film you are to see, Teaching the Learning Disabled Student, was developed to provide awareness that there are strategies which general education teachers can use in adjusting their program to teach the learning disabled student. This film portrays teachers in an auto shop setting, business laboratory, child care class, and welding class attempting to work with students who have three common problems:

1. Poor initial learning
2. Poor recall of sequences
3. Poor transfer and generalization.

The strategies used by these teachers include cognitive behavior modification which is a four-step procedure for devloping self speech to guide learning.

Other strategies demonstrated by these teachers include modeling, memorable sentences, acronyms, visual imagery, and directed teaching for transfer.

In the workshop which would accompany this film, many other strategies would be demonstrated, such as strategies related to students who have problems in organization, listening and speaking, reading, writing and thinking.

The consultation and support which should be provided by special education staff would also be discussed with specific suggestions for the provider (special education) and the recipient (general education).

APPENDIXES

Appendix A. . . . . Post Graduate Services

Appendix B. . . . . Electricity

Appendix C. . . . . Assessment of Vocational Readiness

Post - Graduate Services

ISD Placement Staff

Carl Arko

Darlene Sauve

810 N. Lincoln Rd.
Escanaba, MI 49829
786-9309
1-800-562-4834 from anywhere in the UP
Office Hours: 8 - 4 Monday - Friday

Topics In This Section

Personal Data Packet
Employer Information Files
Community Information Files
Schools for Advanced Study
Apprenticeships
Job Hunter's Guide
Counseling
Employability Skills
Follow-Up Study
Michigan Occupational Information System (MOIS)
Job Development
Michigan Employment Security Commission (MESC)
Bureau of Rehabilitation (BR)

Post-Graduate Services

The ISD Placement Service helps vocational education students find full-time employment in the field for which they were trained, and assists in finding schooling or further training opportunities after graduation.

Personal Data Packet

This is the key to the placement process after graduation. As many packets as needed are supplied free upon request. The packet includes:

Personal Data Sheet (Sample on the next page)
Task Sheet
Candidate Rating Forms (Sample following Data Sheet)
Consent for Access to Student Records Form
Other awards, recommendations, or papers

Student Responsibilities

Have at least three people fill out Candidate Rating Forms
Complete Personal Data Sheet
Return all forms to vocational teacher
Have parent sign Consent Form (Under 18 years old)
Sign Consent Form (Over 18 years old)
Turn in any other material to be included in the packet

Vocational Teacher Responsibilities

Prepare Task Sheet for each vocational student showing what was learned in the vocational class
Teach students how to complete Personal Data Sheet
Forward information and completed forms to the Placement Office

Placement Service Responsibilities

Type and copy Personal Data Sheet and other papers that are included in the Personal Data Packet. Students should *allow at least 2 working days* for this to be done.

ELECTRICITY

Typical Job Titles & Employers Of Electricity Graduates

Electrician - Marinette Marine - Marinette, WI
Laborer - Manistique Dimension & Kiln - Manistique, MI
Aviation Electrician - U.S. Navy - Jacksonville, FL
Machine Repair/Electronics - U.S. Navy - Norfolk, VA
Apprentice Electrician - Roemer Electric - Manistique, MI
Electrician - U.S. Air Force - Shaw, SC
Electrician Helper - Schreck Electric - Hollywood, FL
Electrician Mate - U.S. Navy - San Diego, CA
Maintenance - Schoolcraft Memorial Hospital - Manistique, MI
Construction & Maintenance - DeGrave Quality Homes - Escanaba, MI
Electrician - Denessen Electric - Escanaba, MI
Superintendent of Maintenance & Operations - Cherryland Rural Electric Power Co. - Traverse City, MI
Electrical Foreman - Roemer Electric - Manistique, MI
State Licensed Journeyman Electrician - Hoholiks Inc. - Manistique, MI

Related Education

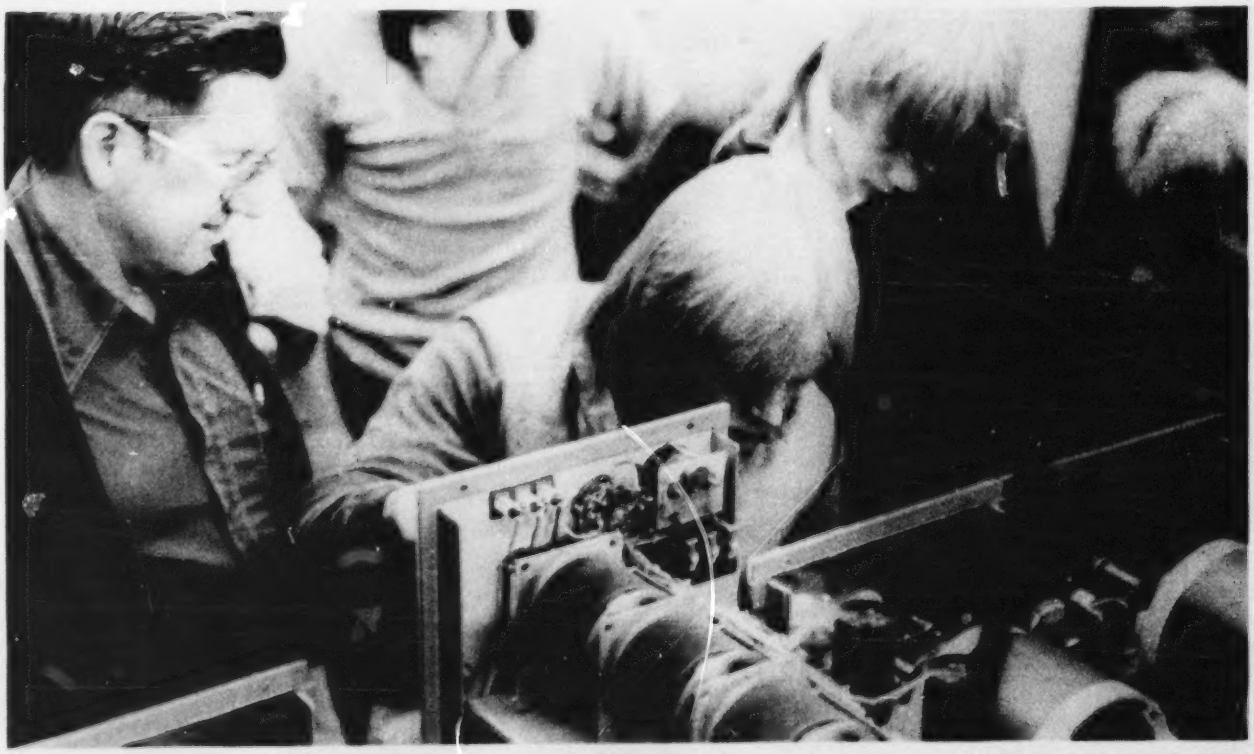
Electricity/Electronics - Bay de Noc Community College - Escanaba, MI
Civil Engineering - Michigan Technological University - Houghton, MI
Electrical Engineering - Michigan Technological University - Houghton, MI
Industrial Maintenance - Northern Michigan University - Marquette, MI
Electrical Engineering - DeVry Institute - Chicago, IL
Electrical Power Technology - Ferris State College - Big Rapids, MI
Basic Electronics - Bay de Noc Community College - Escanaba, MI
Industrial Electronics - Bay de Noc Community College - Escanaba, MI
Electricity - Ferris State College - Big Rapids, MI

Dean Beaudre, a 1975 graduate of Manistique High School, is a state licensed, journeyman electrician working for Roemer Electric in Manistique.

Electricity

The Electrical Program prepares students for job entry in residential wiring, commercial wiring, and motor repair. The major emphasis will be on applications, service, and theory. Students learn basic electrical principles, blueprint reading and electrical symbols, electrical safety, residential and commercial wiring systems, and electrical motors and control circuits through reading and workbook exercises based on the National Electrical Code, combined with lab simulations and time spent practicing residential wiring. Students also cooperate with the Building Trades Program by doing the electrical work for the houses that those classes construct.

In the second year program the student will progress further in the fields of electricity, electronics, and control circuits. The student may also, depending upon individual interest, concentrate upon such areas as basic electronics and entertainment electronics.



Electricity
Learning Activities

I. Fundamentals of Electricity

A. Terms & Definitions
B. Electron Theory
C. Sources of Electricity
D. 115-Volt & 230-Volt Service
E. Ohm's Law
F. Electrical Rates
G. Operating Costs

What electricity is, how it is used, how it is produced, and the theory of how it works are the foundations upon which the remainder of the course is built.

II. Electrical Safety

A. Common Electrical Accidents
B. First Aid
C. Freeing a Person Receiving Electrical Shock
D. Electrical Fires
E. Fuses & Circuit Breakers
F. Reasons Circuits Fail
G. National Electrical Code
H. Construction Site Safety

Electricity is deadly and must always be treated with respect. Students also work on construction sites where additional safety practices are important.

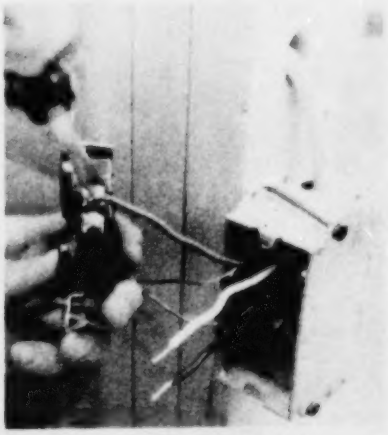
III. Planning Residential Wiring

A. Blueprint Reading
B. Wiring Diagrams
C. Electrical Symbols
D. Planning Various Rooms
E. Branch Circuits
F. Service Entrance
G. Wire Size
H. National Electrical Code

Starting with the architect's drawings of the house, students will plan the wiring and fixtures needed for the house. The circuits must all meet the National Electrical Code.

IV. Residential Wiring Practices

A. Tools Used for Wiring
B. Electrical Devices
C. Wire & Conductors of Electricity
D. Factors in Voltage Drop
E. Wiring Procedure



Wiring the house, running the wire, and installing the fixtures. The student must be able to draw the diagram that shows the circuit and explain how and why it works.

Jack L. Roemer

Family: Wife — Ruth
Children — Jill
Jack, Jr.
Cheryl
Carla
Paul

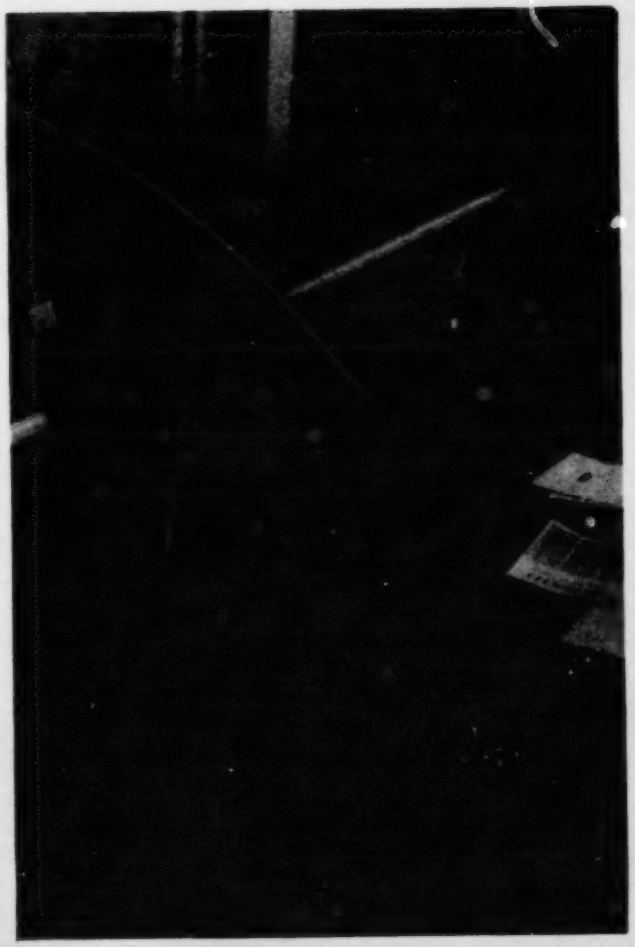
Hometown: Manistique

Apprentice Lab—Room 405
Practical & Fine Arts Building
Bay de Noc Community College
Phone: 786-5802 - Ext. 44

Vocational Electricity Lab—Room 50
Manistique Satellite Center
Manistique High School
Phone: 341-2195 - Ext. 41

Work Experiences Include

U.S. Navy—Shipfitter
Electrician—Inland Lime & Stone co.
Gulliver, MI
Electricity & Heating Installation
Hoholick Plumbing, Heating, & Electricity
Owner & Master Electrician
Roemer Electric



Teaching Experiences Include

Vocational Electricity
Delta-Schoolcraft ISD

Education

Manistique High School
State Diploma - G.E.D.
Inland Steel Electrical Training Program
Apprentice Electrician
Lenox Heating School, Marshaltown, IA
State Licensed Journeyman
Thermtron Insulation & Ventilating School
Ft. Wayne, IN
Federal Pacific Electric Heating School
Master Electrician
Bay de Noc Community College
Basic Electronics
Industrial Electricity

Hobbies, Interests, Organizations

Private airplane pilot
Chairman - City Recreation Board
Hunting
Fishing

Comments About My Class
Jack Roemer

I think basically all kids are good: my job is getting goodness out and applying it to electricity.

I expect them all to be able to go out and get some kind of a job when they finish this class. They may not all be electricians; but they might get a job in electrical sales or other related areas.

I believe in letting students work in pairs in this class. What one doesn't get, the other one will. They get a lot more out of it that way.

I always go over the answers to all the test questions three or four days before a test. They get more out of it by knowing the answer to all the questions and problems than if I make it so hard for them that they can't pass the test. I try to make the test questions easy to understand so the student has a chance to do the best possible. I also tell my students that I'd think more of them if they try on a test and miss everything than copy from someone else's paper. When they do their own work, I know what they can do and where they need help; then I can sit down and help them on areas where they're having problems.

I expect students in my class to give me and anyone else who comes into class their respect; and I want them to do their best--try 100%. As long as you're giving 100% in this class, you'll get through it.

Grading Policy

Students are graded on:

1. Workbook & Written Tests—50%
2. Work Habits & Attitudes—25%
3. Lab Work—25%

Things To Consider Before Enrollment

Success Indicators

A demonstrated interest in becoming a professional electrician.

Experience in house wiring, working with electrical appliances, radios, or electric motors.

Students who have had algebra seem to move ahead faster, but it is not required.

Accuracy in math computations.

Use information from reference books, tables, charts and graphs, especially in Units III, VI, and IX.

Visualize a house from a blueprint or floor plan—Unit IV.

Follow sequential procedures.

Read a ruler to 1/16".

Typical Math Problems

Ohm's Law is $Amperage = \frac{Voltage}{Resistance}$. Given a resistance and amperage find the voltage.

The load for lighting permitted for dwelling units is 3 watts per square foot of occupied area. What is the minimum number of 15-ampere, 120-volt lighting circuits if the dwelling has 4000 square feet? (The student would already know that $amperes = \frac{watts}{volts}$.)

In a 120-volt circuit how much amperage is drawn by a 1500-watt appliance?

Textbooks

Electrical Wiring - Residential. Mullin. Delmar Publishers, 1978.

Readability level according to Raygor Index: Average, Grade 10
Range, Grade 6-Professional

Electricity I. Kubala. Delmar Publishers, 1974.

Readability level according to FORECAST formula: Average, Grade 14

National Electrical Code - 1978 Edition.

Readability level according to Raygor Index: Average, Professional
Range, Grade 12-Professional

Suggested PreVocational Classes

Escanaba

Junior High
- Electricity

Senior High
- Algebra
- Introductory Drafting

Gladstone

Senior High
- Algebra
- Technical Drawing I
- Electricity

Things To Consider (Cont.)

Rapid River

Senior High
- General Science
- Algebra
- Power & Metals
- Mechanical Drawing

Manistique

Senior High
- Algebra
- Applied Vocational Math
- Drafting I
- Electricity

Engadine

Senior High
- General Shop
- Drafting
- General Math

Bark River-Harris

Senior High
- Algebra
- Physical Science

Mid-Peninsula

Senior High
- Drafting
- Algebra

Big Bay de Noc

Senior High
- Drafting
- General Industrial Arts
- PreVocational Skills
- Employability Skills
- Algebra

Electricity General Information

Delta County

Location

Apprentice Lab—Room 405
Practical & Fine Arts Building
Bay de Noc Community College
Phone: 786-5802 - Ext. 44

Hours

7:30 - 9:30 Electricity II
9:30 - 11:30 Electricity I

These hours may vary from year to year. Confirm times with Roger Gustafson, Are Programs Coordinator, DSISD. Phone: 786-9315.

Transportation

Bus transportation is provided by the local school.

Private cars may be used with approval of the local school and the ISD.

Special transportation arrangements may be made with the ISD.

Class Size

18 students per class
See Section II for an explanation of how student quotas are determined.

Schoolcraft County

Location

Vocational Electricity Lab—Room 50
Manistique Satellite Center
Manistique High School
Phone: 341-2195 - Ext. 41

Hours

12:40 - 2:40 Electricity I & II

These hours may vary from year to year. Confirm times with Scott Carey, Satellite Center Coordinator. Phone:341-2195-Ext. 40.

Transportation

Bus transportation is provided by the local school.

Private cars may be used with approval of the local school and the ISD.

Special transportation arrangements may be made with the ISD.

Class Size

22 students per class.
See Section II for an explanation of how student quotas are determined.

ASSESSMENT OF VOCATIONAL READINESS

(AVR)

Student _____ Age _____

School District _____ Grade _____

AVR for Vocational Training in: _____

IEPC Chairperson _____ Date _____

INSTRUCTIONS

Part A: Readiness Level

Answer the sixteen questions by entering the assigned value in the appropriate column. Total both columns. Subtract the No total from the Yes total.

Part B: Planned Support Services

Enter special education support plans which have been made to compensate for shortcomings in academic performance, behavior, or other areas of concern.

DETERMINING READINESS

The sixteen questions in Part A represent measures of student readiness to profit from vocational training. These measures not only reflect a considerable amount of existing research, more importantly, they are drawn from the practical experiences of vocational instructors. The AVR is designed to help determine the appropriateness of vocational placement by comparing student experience and achievement to levels of preparation successful students have brought to class. Thus, positive scores indicate potential for success, while negative scores will bring the proposed placement into question.

A low AVR score does not preclude vocational placement. When students have had the benefit of carefully planned and sustained support services, they have experienced success in school and on the job. The Planned Support Services included in Part B will improve student performance in vocational education, increasing the feasibility of employment.

Developed by Carl Arko, Gary Rackliffe, Nancy Pearson
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PART A: READINESS LEVEL

	VALUE	YES	NO
CAREER EXPLORATION			
Did the student request this vocational program as first choice?	10	☐	☐
Has the student had exposure to this vocation through a friend or relative?	10	☐	☐
Has the student completed the recommended prevocational classes?	Yes = 3/class No = 5	☐	☐
Has the student completed a structured career education or exploration program?	10	☐	☐
Has the student completed a vocational interest or aptitude test **and** does it support this placement?	10	☐	☐
WORK EXPERIENCE			
Has the student been employed?	5	☐	☐
ISD VOC-ED BOOK			
Has the student reviewed and discussed the appropriate information?	10	☐	☐
Have the student's parents reviewed and discussed the appropriate information?	10	☐	☐
PREREQUISITE COURSES			
Has the student sucessfully completed required prerequisite courses?	5	☐ Ineligible	
COMMUNICATION SKILLS			
Can the student read at textbook grade level?	5	☐	☐
Can the student communicate at grade level?	5	☐	☐
COMPUTATION SKILLS			
Can the student apply the math skills needed?	5	☐	☐
PERSONAL-SOCIAL SKILLS			
Does the student interact appropriately with teachers and peers?	10	☐	☐

	VALUE	YES	NO
EMPLOYMENT FEASIBILITY			
Has the student discussed job opportunities with the vocational placement office?	10	☐	☐
Is the Student able **and** willing to relocate to secure employment?	5	☐	☐
Are the student's parents aware of employment feasibility?	5	☐	☐
	TOTALS	☐	☐

READINESS LEVEL ("Yes" Minus "No") _____

PART B: PLANNED SUPPORT SERVICES

COMMUNICATION SKILLS

Reading--What provisions are included in this student's IEP that will help the student complete textbook assignments and use the textbook as a reference?

_____

_____

_____

_____

Writing--What provisions are included in the student's IEP that will help the student complete written assignments?

_____

_____

_____

_____

Speaking--What provisions are included in this student's IEP that will help the student apply the communication skills required?

_____

_____

_____

_____

COMPUTATION SKILLS

What provisions are included in this student's IEP that will help the student apply the computational skills required?

_____

_____

_____

_____

PERSONAL-SOCIAL SKILLS

What provisions are included in this student's IEP that will increase appropriate behavior and decrease inappropriate behavior?

_____

_____

_____

_____

OTHER

_____

_____

_____

_____

Student _____ Date _____

Parent or Guardian _____ Date _____

Special Education Teacher _____ Date _____

Special Needs Coordinator _____ Date _____

Vocational Teacher _____ Date _____